# INSTRUCTIONS
# FOR
# INSTALLATION AND OPERATION
# SUTCO
# UHF CONVERTER - VHF BOOSTER
# COMBINATION
# Model 21 A

Sutton Electronic Company, Inc.

LEXINGTON 5, KENTUCKY

(2) Turn the selector switch on the Booster Converter to UHF.

(3) The Booster knob (upper left) should be turned to the channel selected in step 1.

(4) Rotate the UHF tuning knob (upper right) to the correct UHF channel.

(5) The UHF fine tuning knob (bottom outside) may then be adjusted for best picture and sound.

Changes within the unit resulting from increasing temperature when the unit is first turned on may make it necessary to make slight readjustment of the UHF fine tuning control after the first few minutes of operation when receiving a UHF station.

to terminal 4 and the outer conductor connected to terminal 3. The other end of the cable should then be connected to the antenna terminals of the receiver. The input and output leads should be well separated.

UHF

If the Booster-Converter is to be used in a strong UHF signal area connect the loop antenna supplied with the unit to the UHF antenna terminals. If an external UHF antenna is required it should be connected to the terminal board labeled "UHF" with a 300 ohm balanced line. When using an external UHF antenna the loop must be disconnected. Plug the power cord into a 120 volt AC, 50 to 60 cycle outlet. IMPORTANT: Do not connect the Booster-Converter to a DC outlet.

## DESCRIPTION

The Sutco Model 21A Booster-Converter is a combination unit designed to provide a VHF Booster and a UHF Converter in a common cabinet. The Booster employs a 6J6 type tube in a push-pull wide band amplifier designed to amplify television signals on channel 2 through 13. Provision is made for the use of 300 ohm balanced line or 75 ohm coaxial cable at both input and output terminals of the Booster. A four-position selector switch provides for turning the unit on, switching to high or low channels for boosting action and UHF television reception.

With the selector switch in the UHF position plate voltage is applied to the 6AF4 UHF oscillator tube. Output from the 1N72 crystal mixer is switched to the input of the booster which now becomes an I.F. amplifier.

UHF tuning is continuous, channels 14 to 83. The self contained power

# INSTALLATION

## VHF

Connect the antenna lead in from the VHF antenna to the VHF input terminals of the Booster-Converter. If the antenna lead in is 300 ohm or any type of balanced line it should be connected to terminals 1 and 2. Should the lead in be of the unbalanced variety, such as coaxial cable, the inner conductor should be connected to terminal 2 and the shield or outer conductor to terminal 3.

Connect the output of the Booster-Converter to the receiver with a SHORT length of line. If the receiver is designed for balanced input, connect a short length of 300 ohm line from terminals 4 and 5 on the Booster-Converter to the antenna terminals of the receiver. If the receiver is designed for unbalanced input, the inner conductor of a short length of coaxial cable should be connected

VHF

(1) To place the Booster in operation - rotate the selector switch knob to either "2-6" or "7-13" depending upon the channel to be received.

(2) After allowing several seconds warm-up time, rotate the upper left knob for best picture and sound.

The VHF calibration markings (2 thru 13) are only approximate and in each case tune the Booster for best picture and sound regardless of the setting of the tuning dial. With the Selector Switch knob in the off position, the VHF antenna input terminals are connected directly to the output terminals.

UHF

(1) Rotate the channel selector knob on the TV receiver to channel 5 or 6. Use the channel not occupied by a local TV station.

This Booster-Converter is sold under the Warranty as described on the enclosed warranty card.